reading said access information from the information file stored in the first storage medium when the data processor accesses a migrated file,

opening the transferred file in the second storage medium based on the access information acquired by reading said information file, and

reading the stored data from the opened file in the second storage medium and transferring the read data in to a predetermined area on the memory of the data processor and storing the same thereat without transferring to or storing the read data to the first storage medium.

## REMARKS

Entry of this amendment and these remarks is respectfully requested. In view of the above amendments and following remarks, reconsideration and allowance of the present application is respectfully requested.

It is submitted that these claims, as originally presented, are patentably distinct over the prior art cited by the Examiner, and that these claims were in full compliance with the requirements of 35 U.S.C. §112. Changes to these claims, as presented herein, are not made for the purpose of patentability within the meaning of 35 U.S.C. §101, §102, §103, or §112. Rather, these changes are made simply for clarification and to round out the scope of protection to which Applicant is entitled.

Claims 2-12 and 14-17 and amended claims 1 and 13 are in this application.

Claims 1-17 are rejected under 35 U.S.C. §103(a) as being unpatentable over Lam (US Patent No. 5,564,037) in view of Kamiyama (US Patent No. 5,893,139).

Independent claim 1 has "...reading means for reading the stored data from the opened file in the second storage medium and loading the read data in to a predetermined area on

the <u>memory of the data processor</u> and storing the same thereat <u>without transferring to or</u> <u>storing the read data to the first storage medium</u>." (Underlining and bold added for emphasis.)

In explaining the above 103 rejection, the Examiner appears to rely on Lam to disclose the above recited feature of claim 1. More specifically, the Examiner relies on S2 of Fig. 2, col. 6, lines 21-23, and col. 8, lines 61-64 of Lam to disclose such feature. Although such portions of Lam as relied upon by the Examiner (hereinafter "Lam") appear to disclose reading an opened file, transmitting a copy thereof to a secondary storage device 20, and migrating a file from the secondary storage device 20 to a tertiary storage device 30, Lam does not appear to disclose the tertiary storage device 30 is a predetermined region on the memory of a data processor. In fact, such tertiary storage device 30 appears to be a tape storage device. (See col. 5, line 4 of Lam.)

Additionally, Lam discloses in col. 8, lines 26-31 that "after the data from the migrated file is read, the sparse file is opened in step S12 by the migration engine 11. In step S13 the contents of the original file retrieved from the HSM system 2 are loaded into the sparse file, converting the sparse file back to the original file having its original physical location.

Thus, after step S13, the original file is again resident on the file server 10 in it original (e.g., premigration) form." Therefore, Lam appears to disclose that during a demigration process, the opened migrated file is stored on the primary storage device before being stored in a memory to be used by an application program. On the other hand, the reading means of claim 1 reads "the stored data from the opened file in the second storage medium" and loads "the read data in to a predetermined area on the memory of the data processor" and stores "the same thereat without

transferring to or storing the read data to the first storage medium." (Underlining and bold added for emphasis.)

Therefore, for the reasons stated above, independent claim 1 is believed to be distinguishable from the applied combination of Lam and Kamiyama. Accordingly, withdrawal of the 103 rejection of independent claim 1 is respectfully requested.

For reasons similar to those described above with regard to independent claim 1, amended independent claim 13 is believed to be distinguishable from the applied combination of Lam and Kamiyama. Accordingly, withdrawal of the 103 rejection of independent claim 13 is respectfully requested.

Claims 2-12 and 14-17 depend from amended independent claims 1 and 13 respectively, and, due to such dependency, are also believed to be distinguishable from the applied combination of Lam and Kamiyama for at least the reasons previously described.

Therefore, withdrawal of the 103 rejection of claims 2-12 and 14-17 is respectfully requested.

The Examiner has made of record, but not applied, several U.S. patents. The Applicant appreciates the Examiner's explicit finding that these references, whether considered alone or in combination with others, do not render the claims of the present application unpatentable.

Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached page is captioned <u>"Version with markings to show changes made."</u>

It is to be appreciated that the foregoing comments concerning the disclosures in the cited prior art represent the present opinions of the Applicant's undersigned attorney and, in the event, that the Examiner disagrees with any such opinions, it is requested that the Examiner indicate where, in the reference or references, there is the basis for a contrary view.

In view of the foregoing, favorable reconsideration and withdrawal of the rejection of claims 1-17 and the allowance of this application with claims 1-17 are respectfully requested.

Respectfully submitted, FROMMER LAWRENCE & HAUG LLP

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## Version with markings to show changes made

## **IN THE CLAIMS**

Please amend claims 1 and 13 by rewriting the same to the following:

1. (Amended) A data storage and retrieval apparatus having a data processor, including a memory, central processing unit, and first storage medium, which performs migration for transferring a file stored in the first storage medium to a second storage medium provided outside of the data processor and [then] generates an information file including access information [for the file] in the first storage medium, comprising:

an information acquisition means for reading said access information from the information file stored in the first storage medium when the data processor accesses a migrated file,

a file opening means for opening the transferred file in the second storage medium based on the access information acquired [from] by the information acquisition means, and

a reading means for reading the stored data from the opened file <u>in the second</u> storage medium and <u>loading the read data</u> [storing it] in <u>to</u> a predetermined [region] <u>area</u> on the memory of the data processor <u>and storing the same thereat without transferring to or storing the read data to the first storage medium.</u>

13. (Amended) A data storage and retrieval method wherein a data processor, including a memory, central processing unit, and first storage medium, performs migration for transferring a file stored in the first storage medium to a second storage medium

provided outside of the data processor, [then] <u>and</u> generates an information file including access information [to] <u>in</u> the first storage medium, comprising <u>the</u> steps of:

reading said access information from the information file stored in the first storage medium when the data processor accesses a migrated file,

opening the transferred file in the second storage medium based on the access information acquired [from the information acquisition means] by reading said information file, and

reading the stored data from the opened file in the second storage medium and transferring the read data [storing it] in to a predetermined [region] area on the memory of the data processor and storing the same thereat without transferring to or storing the read data to the first storage medium.